

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-21. (canceled)

22. (Currently amended) A digital contents distribution server ~~connected to a first network and for providing digital contents to a second network connected to the first network~~, the server comprising:

a connection to a first network that is connected to the second network through lines different in communication capacity; and

a central processor unit configured for ~~means for~~ dividing the digital contents into a plurality of packets;

~~means for~~ a storage device storing a list ~~including of~~ destinations included in the second network;

~~means for~~ the central processor unit further configured for transmitting packets of a minimum unit for constructing the digital contents from the server through the first network to the second network;

~~dynamic allocation means~~ the at least one processor further configured for dynamically allocating, by use of the list, the destinations to the second network to which the packets of the minimum unit are transmitted;

~~means for~~ a receiver configured for receiving receipt notices from the destinations;

~~means for~~ the central processor unit further configured selecting a at least one destination, from the destinations, serving as an intermediate node by use of the receipt notices; and

~~means for~~ the central processor unit further configured for transmitting the packets of the minimum unit by use of the destination selected as the intermediate node, wherein the

packets of the minimum unit mean the minimum packets capable of reconstructing original digital contents without the overlap of the packets.

23. (Currently amended) The server ~~according to~~ of claim 22, wherein the ~~dynamic allocation means comprises: means for~~ the central processor unit further configured for: registering, with the server, a time when the server transmits the packets of the minimum unit to a predetermined destination; ~~means for~~ registering, with the server, a time when a client having the predetermined destination issues the receipt notice of the packets of the minimum unit; and ~~means for~~ calculating a time difference between the transmission time and the receipt notice issuance time.

24. (Currently amended) The server according to claim 22, further comprising: a destination list; and ~~means for~~ wherein the central processor unit is further configured for dynamically updating the destination list in association with a change of a construction of the second network.

25. (Currently amended) A client for receiving digital contents distributed through a first network and constructing a second network connected to the first network, the client comprising:
a receiving buffer constructed as a ring buffer that writes the received packet to the address corresponding to the packet identifier for each time of receiving the packet and configured for:

~~means for~~ receiving, through the first network, dynamically allocated packets of a minimum unit constructing digital contents divided into a plurality of packets, wherein the packets of the minimum unit mean the minimum packets capable of reconstructing original digital contents without the overlap of the packets;

~~means for~~ receiving packets for reconstructing the digital contents through the second network; and

a central processor unit configured for ~~means for~~ making clients ~~included~~ in the second network hold the digital contents therein by use of the packets of the minimum unit received through the first network and packets received from other clients through the second network.

26. (Currently amended) The client according to claim 25, ~~further comprising: means wherein~~
the central processor unit is further configured for preparing a receipt notice ~~including which~~
comprises a time of receiving the packets of the minimum unit.

27. (Currently amended) The client according to claim 25, ~~further comprising: means for~~
wherein the central processor unit is further configured for identifying the packets of the
minimum unit from the packets received from the other clients.

28. (Currently amended) The client according to claim 25, further comprising: a list of members
constructing the second network; and ~~means the central processor unit is further configured for~~
updating the list in any of cases where a client is added to and deleted from the second network.

29. (Currently amended) A digital contents distribution system for distributing digital contents ~~to~~
~~a predetermined wide area group through first and second networks~~, the system comprising:

a server connected to the first network and for holding therein and transmitting the digital
contents;

a wide area group, a first network and a second network connected to the first network
through lines different in communication capacity; and

a plurality of groups constructed by including clients constructing the second network
connected to the first network and for constructing the wide area group for receiving and
providing the digital contents,

wherein the server ~~comprises means~~ is configured for dividing the held digital contents
into a plurality of packets and transmitting packets of a minimum unit for constructing the digital
contents to the clients in the group by dynamically allocating the packets without overlap, and

wherein each of the clients having received the packets of the minimum unit ~~comprises~~
~~means for distributing~~ distribute copies of the packets of the minimum unit received from the
server to all of the clients constructing a group including the each client and another client

constructing another group, and wherein the packets of the minimum unit mean the minimum packets capable of reconstructing original digital contents without the overlap of the packets.

30. (Currently amended) A server connected to a first network and for ~~holding therein~~ and distributing digital contents through the first network to a wide area group including a plurality of groups connected through a second network, the server comprising:

an interface configured to acquire the digital contents;

a storage device for holding therein the digital contents;

a central processor unit configured for:

reading the digital contents from the storage device;

~~means for~~ creating packets of a minimum unit by dividing the ~~held~~ digital contents into a plurality of packets, wherein the packets of the minimum unit mean the minimum packets capable of reconstructing original digital contents without the overlap of the packets;

~~means for~~ selecting distribution destinations of the packets of the minimum unit in such a manner that identical packets of the minimum unit are not overlapped for a predetermined group; and

~~means for~~ transmitting and dynamically allocating the packets of the minimum unit for constructing the digital contents to clients of the selected destinations in the group.

31. (Currently amended) The server according to claim 30, wherein the ~~means for creating packets of a minimum unit comprises~~ means the central processor unit is configured for creating packets of a minimum unit including data for distributing a copy of the packets of the minimum unit at least to another group.

32. (Currently amended) A method for controlling a computer as a server ~~for holding therein~~ and for distributing digital contents through a first network to a wide area group including a plurality of groups ~~connected through a second network~~, the method making the computer execute the steps of:

storing the digital contents in a storage device;

creating packets of a minimum unit by dividing the held digital contents into a plurality of packets, wherein the packets of the minimum unit mean the minimum packets capable of reconstructing original digital contents without the overlap of the packets;

selecting and registering therewith distribution destinations of the packets of the minimum unit in such a manner that identical packets of the minimum unit are not overlapped for a predetermined group;

storing data of the selected distribution destinations as the packets of the minimum unit;
and

reading and transmitting, for constructing the digital contents, the stored packets of the minimum unit to clients of the selected distribution destinations in the group while dynamically allocating the read-out packets;

wherein the group is connected to the server through a second network connected to the first network through lines different in communication capacity.

33. (canceled)

34. (Currently amended) A computer readable recording medium recording therein a program for controlling a computer as a server for holding therein and distributing digital contents through a first network to a wide area group including a plurality of groups connected through a second network,

wherein the program ~~makes~~ when executed causes the computer execute the steps of:

creating packets of a minimum unit by dividing the held digital contents into a plurality of packets;

selecting and registering therewith distribution destinations of the packets of the minimum unit in such a manner that identical packets of the minimum unit are not overlapped for a predetermined group;

storing data of the selected distribution destinations as the packets of the minimum unit;

and

reading and transmitting, for constructing the digital contents, the stored packets of the minimum unit to clients of the selected distribution destinations in the group while dynamically allocating the read-out packets;

wherein the group is connected to the server through a second network connected to the first network through lines different in communication capacity.

35- 41. (Canceled)